

GARNETS, N.A.

3(5)

PHASE I BOOK EXPLOITATION

SOV/2172

Akademiya nauk SSSR. Mezhdunarodnaya postoyannaya komissiya po zhelezu

Zhelezorudnyye mestorozhdeniya Altaye-Sayanskoy gornoy oblasti, tom. 1, kniga. 1:
Geologiya (Iron Ore Deposits of the Altay-Sayan Mountain Region, Vol 1,
Book 1: Geology) Moscow, 1958. 330 p. (Series: Zhelezorudnyye
mestorozhdeniya SSSR) Errata slip inserted. 2,500 copies printed.

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geologii i okhrany neдр, USSR. Zapadno-Sibirskoye geologicheskoye upravleniye,
USSR. Krasnoyarskoye geologicheskoye upravleniye, Sibirskiy geofizicheskiy trest,
Vsesoyuznyy nauchno-issledovatel'skiy geologicheskoye institut.

Eds. of the vol.: P. Ye. Sledzyuk, and G.A. Sokolov; Resp. Ed. of Series: I.P.
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Skobnikov, P. Ye. Sledzyuk, S.S. Smirnov-Verin (Deceased) G.A. Sokolov,
S.G. Strumilin, Academician, V.B. Khlebnikov, N.A. Chinakal, and I.S. Shapiro;

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Iron Ore Deposits (Cont.)

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Ed. of Publishing House: I.G. Kudashova; Tech. Ed.: I.F. Kuz'min.

PURPOSE: This book is intended for structural, exploration and mining geologists, for geophysicists and mineralogists, and industrial planners.

COVERAGE: This work purports to be the first attempt to review and summarize all the material that has been published on the iron-ore deposits of the Altay-Sayanskaya oblast' during the last 20 years. This area, the work reports is fast becoming one of the most important iron-ore bases in the Soviet Union. The book discusses the economic aspects of the geography and geology of the individual deposits, presents a qualitative and quantitative (as of January 1, 1957) analysis of ore reserves, and evaluates the prospects and possibilities of further development of the Altay-Sayanskaya iron-ore base. The genetic characteristics of iron-ore mineralization of the area are described. Extensive information on the geology of individual deposits, complexes, and regions is provided, and a general genetic description of ore mineralization in the Altay Sayanskaya region is given. There is a historical account of the exploration and development of the region, and of the development of concepts on the genesis of mineralization in the area. The following scientists participated in the preparation and writing of this volume: G.L. Pospelov, S.S. Lapin, N.Kh. Belous,

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Iron Ore Deposits (Cont.)

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V.M. Klyarovskiy, O.G. Kine, and V.A. Vakhrushev of the West Siberian Branch of the AN SSSR, I.S. Shapiro of the Permanent Interdepartmental Committee on Iron, A.S. Kalugin, A.S. Mukhin, N.A. Garnets, Yu. A. Speyt, M.I. Selivestrova, V.G. Rutkevich, G.P. Bykov, N.I. Nikonov, and K.G. Sakovich of the West Siberian Geological Administration V.I. Medvedkov, A.S. Aladyshkin and F. Ya. Pan of the Krasnoyarsk Geological Administration, M.G. Rusanov, E.A. Yazbutis, Yu. V. Rozhdestvenskiy, G. Ye. Savitskiy, and A.D. Prodanchuk of the West Siberian Geological Survey Chermetravvedka Trust, P.A. Lysenko, T.I. Lebedev, T.Ya. Kamenskaya, A.I. Maslennikov and R. Pipar of the Siberian Geophysical Trust, A.L. Dodin of the VSEGEI, A.S. Mitropol'skiy of the Mining Expedition, V.A. Lukin of the Mining Administration of the Kuznetsk Metallurgical Combine, S.S. Zimin of the Tomsk Polytechnic Institute, I.V. Derbikov of the Sibneftegeofizika Trust, and V.G. Korel' of the Siberian Metallurgical Institute. There are 103 diagrams including insert maps and 10 tables. There are 271 references, all Soviet.

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Iron Ore Deposits (Cont.)

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Foreword (Academician I.P. Bardin)

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· Ch. 6. General Characteristics of the Magnetic Anomalies in Gornaya
Shoriya, Kuznetskiy Alatau and Salair (P.A. Lysenko, T.I. Lebedev,
T. Ya. Kamenskaya, A.I. Maslennikov, A.S. Mukhin)

313

Bibliography

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AVAILABLE: Library of Congress

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MM/mas
8-13-59

GARNETSKIY, V.A., aspirant; KOBAZEY, Ye.I., starshiy laborant; RACHINSKIY, V.V., doktor khimicheskikh nauk, prof.; FURMAN, A.O., starshiy prepodavatel'

Variant of the automatic apparatus for recording the elution and column curves of the distribution of tagged elements in chromatographic analysis. Izv. TSKHA no.4:224-229 '63.
(MIRA 17:1)

ZOLOTAREVSKIY, I.Ya.; SAPRYKIN, A.V.; GUBANOV, V.S.; GARNETSKOV,
V.Z.; ILYUSHIN, A.P., red.; EL'KINA, E.M., tekhn. red.

[The container] Tara. Izd.2., perer. Moskva, Gostorgizdat,
1963. 229 p. (MIRA 17:1)
(Containers)

S/081/62/000/006/103/117
B168/B101

AUTHOR: Garney, K.

TITLE: Non-metallic construction materials at high temperatures

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 6, 1962, 625, abstract
6P134 (Sb. "Probl. vysokikh temperatur v aviats.
konstruktsiyakh", M., Izd-vo in. lit., 1961, 101 - 144)

TEXT: High polymers (factors reducing the strength of polymers; transparent polymers; opaque polymers), reinforced polymers (properties of fibers and flakes, polymers for reinforced plastics, fiber-reinforced polymer construction materials), polymer adhesives, ceramic materials, and also the thermal and electrical properties of non-metallic construction materials and the use of non-metallic materials in air-craft construction are examined. 83 references. [Abstracter's note: Complete translation.]

Card 1/1

GARNICHEV, D.A.; GOLOVANOV, V.A.; KRYLOV, S.S.; KURASOV, S.I.;
OSIPOV, S.I.; PRIVALOV, V.V.; RADIONOV, N.I., inzh.,
retsenzent; SIDOROV, N.I., inzh., red.; VASIL'YEVA, N.N.,
tekhn. red.

[Electric locomotive with semiconductor rectifiers] Elek-
trovoz s poluprovodnikovymi vypriamiteliami. Moskva,
Transzheldorizdat, 1963. 98 p. (MIRA 17:1)

GARNICHEV, D.A.; GOLOVANOV, V.A.; KRYLOV, S.S.; KURASOV, S.I.;
OSIFOV, S.I.; PRIVALOV, V.V.; RADIONOV, N.I., inzh.,
retsenzent; SIDOROV, N.I., inzh., red.; VASIL'YEVA, N.I.,
tekhn. red.

[Electric locomotive with semiconductor rectifiers] Elektro-
voz s poluprovodnikovymi vypriamiteliami. Moskva, Transzhel-
dorizdat, 1963. 98 p. (MIRA 16:12)

(Electric locomotives)

(Electric current rectifiers)

SUBJECT: USSR/Welding

135-3-10/17

AUTHORS: Garnik I.I. Engineer, Gershovich, S.A., Engineer, and
Protzenko V.N., Engineer.

TITLE: Electrodes "ACK-50" of type "350A" for Welding Steel "HЛ-2".
(Elektrody ACK-50 tipa 350A dlya svarki stali HЛ-2).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 3, p 22, (USSR).

ABSTRACT: Type "350A" electrodes are used for low-alloy construction steel. In view of acute need for such electrodes, the laboratory of the author's plant has developed a new electrode coating for welding steel "HЛ-2".

The recipe for the coating of "CM-11" electrodes which are not applicable for welding steel "HЛ-2" (give pores, vertical and overhead welding is impossible) was used as the initial basis.

The coating for electrode type "350A" of grade "ACK-50", applicable for use with a.c. and d.c. (with reverse polarity) was created as a result of the latest work. The recipes of coatings "CM-11" and "ACK-50" are as specified below (in % of weight):

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135-3-10/17

TITLE:

Electrodes "AK-50" of type "3-50A" for Welding Steel "HЛ-2".
(Elektrody AK-50 tipa 3 50A dlya svarki stali HЛ-2).

	<u>M-11</u>	<u>K-50</u>
Marble.....	28.2	26.4
Feldspar.....	20.3	19.2
Sodium silicate.....	-	3.8
Ferrosilicon.....	8.5	9.0
Ferromanganese.....	3.5	3.3
Powdered iron.....	32.8	31.0
Powdered aluminum.....	-	1.0
Titanium dioxide.....	3.5	3.3
Cellulose.....	1.9	1.8
Potash.....	1.3	1.2
Liquid glass of 1.40 - 1.44 density, - the potassium liquid glass 75 %, the sodium liquid glass 25 % (of dry compound weight)	22-24	22-24

The thickness of coating recommended:

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TITLE:

Electrodes "ACK-50" of type "350A" for Welding Steel "HJ-2".
(Elektrody ACK-50 tipa 350A dlya svarki stali HJ-2).

135-3-10/17

Diameter of the rod in mm	Diameter of the electrode in mm.	The maximum allowable difference in coating thickness, in mm
4	6.25-6.35	0.10
5	7.35-7.50	0.15
6	8.35-8.50	0.15

The resulting mechanical properties (on the average) are: in weld metal: resistance limit 50 kg/mm², relative elongation 28 %; in welded joint: resistance limit 57 kg/mm², angle of bend 180°, impact resistance 18 kg/cm². The electrodes are burning evenly in all space positions, on direct and on alternating current; the fusion is quiet; the weld metal is finescaled the slag covers the weld uniformly and is easily removed; no splattering takes place.

For final and complete tests the electrodes were sent to the welding institute im. Paton of the USSR Academy of Sciences. There it was established that the "ACK-50" electrodes are applicable for welding steel "HJ-2" in all positions and with direct, as well as alternating current; their mechanical properties are cor-

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135-3-10/17

TITLE: Electrodes "ACK-50" of type "350A" for Welding Steel "HJ-2".
(Elektrody ACK-50 tipa 350A dlya svarki stali HJ-2).

responding to type "350A" by the standard "ГОСТ 523-51", destined
for welding heavy duty structures of steel "HJ-2".

The electrodes under consideration are widely applied, also at the
plant "imeni Molotov" in Dnepropetrovsk which produces steel struc-
tures for the combined metallurgical works under construction in
India, and at the plant "imeni Pravda" in Dneprodzherzhinsk for
construction of corn harvesters.

The article contains 3 tables.

ASSOCIATION: Dnyepropetrovsk Electrode Plant.

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 4/4

GARNIK, I.I.

Control of individual operations in the technological process
of manufacturing welding electrodes. Avtom. svar. 17 no.9:
86-89 S '64. (MIRA 17:10)

1. Dnepropetrovskiy zavod "Krasnyy Profintern."

KRUZHALOV, B.D.; SHESTUKHIN, Ye.S.; GARNISH, A.M.

Catalytic oxidation of propylene to acrolein in the presence
of selenium. *Kin.i kat.* 3 no.2:247-251 *Mr-Ap* '62. (MIRA 15:11)

1. Novokuybyshevskiy filial Nauchno-issledovatel'skogo instituta
sinteticheskogo spirta.
(Propene) (Acrolein) (Catalysts)

GARNISH, A.M.; SHAFRANSKIY, L.M.; SKVORTSOV, N.P.; ZVEZDINA, E.A.;
STEPANOVSKAYA, V.F

Catalytic oxidation of propylene to acrolein in the presence of
water vapors. Kin.i kat. 3 no.2:257-260 Mr-Ap '62.

(MIRA 15:11)

1. Novokuybyshevskiy filial Nauchno-issledovatel'skogo instituta
sinteticheskogo spirta.

(Propene) (Acrolein) (Water vapors)

GARNISH, A.M.; SHAFRANSKIY, L.M.; DANILOVA, A.G.; KUZ'MINA, V.A.; Prinimali
uchastiye: ZVEZDINA, E.A.; ISHCHEIKOVA, G.A.

Obtaining acrolein from a propane-propylene fraction. Nefteser. i
neftekhim. no.10:26-28 '63. (MIRA 17:2)

1. Novokuybyshevskiy filial Nauchno-issledovatel'skogo instituta
sinteticheskikh spirtov.

GARNISH, G.V.
GARNISHEVSKAYA, G.V.

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5
4

Synthesis of compounds with silane fluor. N. S. Nam-
stik, A. V. Trencher, L. S. Paracay, and G. V. Garnish-
evskaya. Doklady Akad. Nauk S.S.S.R. 197, 147, 80
(1968); cf. C.A. 49, 8792a. Addn. of Br at 5-0°, and fi-
nally at 60-80° to $R_3SiCH_2SiR_3$ yielded 88.8% Me_3SiCH_2-
 $SiEt_2Br$, bp 170°, d₄ 1.0840, n_D 1.4547, 90.4% Et_3SiCH_2-
 $SiEt_2Br$, bp 113°, d₄ 1.0757, 1.4822, 87.7% $Pr_3SiCH_2SiPr_2Br$,
bp 181-2°, d₄ 1.0031, 1.4732, 91.1% $Bu_3SiCH_2SiBu_2Br$, bp
170-80°, d₄ 0.8667, 1.4748. These in Et_2O or $MePh$ were
treated with NH_3 , secondary derivs. being prepd. in reflux-
ing $MePh$, yielding the following amine derivs.: 34.6%
 $(Me_3SiCH_2SiMe_2)NH_2$, bp 93°, d₄ 0.8352, 1.4478; 61.8% Et_3-
 $SiCH_2SiEt_2NH_2$, bp 105°, d₄ 0.8578, 1.4633; 60% $(Et_3SiCH_2-$
 $SiEt_2)NH_2$, bp 188°, d₄ 0.8360, 1.4809; 72.8% $(Pr_3SiCH_2Si-$
 $Pr_2)NH_2$, bp 153°, d₄ 0.8480, 1.4610; 60% $(Pr_3SiCH_2SiPr_2)-$
 NH_2 , bp 214-16°, d₄ 0.8541, 1.4723; 80.7% $Bu_3SiCH_2SiBu_2-$
 NH_2 , bp 174°, d₄ 0.8435, 1.4638; 60% $(Bu_3SiCH_2SiBu_2)NH_2$,
bp 256-7°, d₄ 0.8622, 1.4731. The secondary derivs. are best
prepd. from the primary amine derivs. and the mono-Br
derivs. by refluxing in $MePh$ followed by passage of NH_3 , 10
hrs.
G. M. Lavolapoff

PM mjc

Inst. Petroleum, A.S. USSR

GARNISHEVSKAYA, G.V.

AUTHOR: TOPCHIEV, A.V., Member of the Academy, 20-3-31/64
 KRENTSEL, B.A., TOLCHINSKIY, I.M., GARNISHEVSKAYA, G.V.
 TITLE: On the Production of Crystalline Polypropylene by the Polymerization
 of Propylene by Means of a Metal-Organic Catalyzer. (O poluchenii
 kristalicheskogo polipropilena na metalloorganicheskom katalizatore,
 Russian)
 PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 114, Nr 1, pp 113-115
 (U.S.S.R.)
 ABSTRACT: The chemistry of polymeric compounds has recently been enriched by
 new methods of polymerization which make it possible to obtain
 stereoregular crystalline poly- α -olefines.
 The papers hitherto published contain hardly any data concerning
 the conditions of the synthesis of the polymerization products.
 Experiments hitherto carried out show that in the case of polymeri-
 zation under atmospheric pressure as well as at increased pressure
 the best results were obtained (at a temperature of nearly 50°).
 As may be seen from table 1, practically the same results were ob-
 tained by working with pure and technical propylenes. The X-ray
 picture of propylen disclosed the existence of sharp characteristic
 rings of crystalline material. The microphotogram did not differ

Card 1/2

On the Production of Crystalline Polypropylene by the Polymerization
of Propylene by Means of a Metal-Organic Catalyzer. 20-1-32/64

from that of NATT.

Investigation of the infrared absorption spectrum of propylene
showed in the broad interval of temperatures the presence of strips
(characteristic in the case of amorphous metal parts), which in-
crease considerably by melting. (With 1 Table and 5 References).

ASSOCIATION: Not given

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Card 2/2

GARNISZEWSKI, M., mgr inzh.

Still more theses on stability. Tech gosp morska 10 no.5/6:153-154
My-Je '60. (EEAI 9:10)

1. Biuro Konstrukcyjne Taboru Morskiego, Gdansk.
(Stability of ships)

GARNITS, S.; BUROV, A.

Improve norms for the number of auxiliary workers. Sots. trud 8
no.9:102-106 S '63. (MIRA 16:10)

SOLOV'YENVA, V.P.; GARNITSKAYA, L.Ye.

Biological activity of preparations from maral antlers preserved
at a low temperature. Apt. dalo 13 no.1:48-53 Ja-F '64.
(MIRA 17:4)

1. Ukrainskiy eksperimental'nyy institut glaznykh bolezney i
tkanevoy terapii imeni V.P.Filatova, Odessa.

30

CA

Insulation mixtures containing kok-saghyz rubber.
 N. N. Garnier. *Vestnik Elektrom.* 12, No. 6, 238
 (1911); *Chem. Zvest.* 1942, 11, 1937. Mixture contg.
 35-50% of kok-saghyz rubber and wet-ground whiting,
 ppd. whiting, talc and clay, resp., and with a thiram
 accelerator, were vulcanized for 10-60 min. in steam at 3
 atm. pressure, and their tensile strengths, elongations at
 rupture, permanent sets after rupture, and elec. properties
 (insulation resistance, power loss after immersion in water
 for 24 hrs.) were detd. The mixt. contg. 50% of kok-
 saghyz and talc as filler, and vulcanized 20 min., showed
 tensile strength of 98 kg. per sq. cm., extensibility of 40%,
 permanent set of 0.1%, dielec. strength of 10.3 kv. per
 mm., elec. resistance of 3.1×10^{11} ohm-cm., and $\tan \delta$ of
 0.05. *Hevea* rubber and kok-saghyz rubber showed no
 fundamental differences in processing or in the properties
 of their vulcanizates. This similarity was found to hold
 true in the manuf. of cables by the extrusion process.
 C. C. Davis

434-31A METALLURGICAL LITERATURE CLASSIFICATION

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ca

300N151 N.N.

Comparative tests of oil-resistant and petroleum-resistant types of rubber. N. N. Garnier. *Kauchuk i Rezina* 1941, No. 6, 45-6; *Chem. Zvest.* 1942, II, 2541.- The comparative behavior of mitts, prepd. from Sovprene, butadiene rubber and smoked sheet, as well as blc. of these was studied, with particular attention to their swelling in transformer oil and in naphtha. A mixt. of Sovprene, S and C black showed the best properties under these conditions.

C. C. Davis

ASAC-51-A METALLURGICAL LITERATURE CLASSIFICATION

GARNIYER, N. N.

Repair of hose cables. Les. prom. 12, No 4, 1952.

GARNIER, N. N.

The effect of reclaim on the quality of cable rubbers.
T. S. Sitnikov, G. A. Blokh, N. N. Garnier, and R. V.
Kuzmina. *Sbornik Trudov Vsesoyuznogo Nauchno-Issledovatskogo
Tsentra* 1954, No. 8, 85-9; *Russk. Zhur., Khim.* 1955, Absir.
No. 60701.—The partial replacement of butadiene-styrene
rubber with the reclaim P-20 in the production of cable
cover and core stock, and its effect on the phys. and mech.
properties of the mixes. is investigated. In the cover stock,
the best results are obtained by using 15% of reclaim and the
av. performance is not lowered. In the core stock it is pos-
sible to replace 50% of the rubber with reclaim.

N. Vasileff

7
- 2 May
4E2C (g)

PHASE I BOOK EXPLOITATION

965

Garniyer, N. N., and Lyubimova, T. N.

Agregaty neprerynoy vulkanizatsii; v pomoshch' kruzham tekhnicheskogo obucheniya
(Arrangement for Continuous Vulcanization; Aid for Technical Study Groups)
Moscow, Gosenergoizdat, 1957. 104 p. 5,000 copies printed.

Ed.: Timokhina, V. I.; Tech. Ed.: Larinov, G. Ye.

PURPOSE: The book is intended for students of technical study groups and
workmen and foremen in the electric cable industry.

COVERAGE: The authors briefly describe the technology of producing cables
and conductors with rubber insulation which existed before the introduction
of arrangements for simultaneous operations and which still exists today.
They describe the technology of continuous vulcanization with the simultaneous
insulation of cable cores (ANV-115) and the sheathing of cables (ANV-150).
They also describe the control and operation of the equipment and control
of the compressor for producing steam at a pressure of 15-20 atm. They outline
safety regulations, duties of the crew, operating conditions of the ANV-115

Card 1/6

Arrangement for Continuous Vulcanization (Cont.)

965

and ANV-150 units, and discuss questions of quality control and trouble-shooting. The book is a result of experience gained in the Ukrakabel, Elektroprovod, Sevkabel, Azovkabel, and other factories. There are 6 Soviet references.

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AVAILABLE: Library of Congress

Card 6/6

JP/gmp
1-7-59

SOV/94-58-12-8/19

AUTHORS: Garniyer , N.N., Kalitin , V.G., and Demchenko, Z.A.

TITLE: A Combined Process of Wire Drawing and Annealing on
Wire Drawing Machines (Sovmeshcheniye protsessa
volocheniya i otzhiga na volochil'nykh mashinakh)

PERIODICAL: Promyshlennaya Energetika, 1958, Nr 12, pp 19-20 (USSR)

ABSTRACT: Copper wire is usually annealed in coils in an oven but this has numerous disadvantages. This brief note describes an annealing device that is fitted to the wire drawing machine so that the wire is annealed as it is drawn. The wire is heated by passage of alternating current at a voltage of 36 V, contact being made by two rollers, the lower of which is in a water bath in which the cooling takes place. During the time that it is being heated the wire passes through a tube which it leaves below water level, the atmosphere of steam in the tube keeps away air so that the copper is bright. Wire produced on this machine is of uniform quality and there is a considerable economy of electric power. This

Card 1/2

SOV/94-58-12-8/19

A Combined Process of Wire Drawing and Annealing on Wire Drawing
Machines

suggestion was awarded a second prize in an All-Union
Power Economy Competition. There is 1 figure.

Card 2/2

SOV/84-58-5-15/57

AUTHOR: Garnier, N.

TITLE: Our Experience in Accident-free Work (Nash opyt bezavariynoy raboty)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, ⁵Nr 5, pp 16-17 (USSR)

ABSTRACT: The article reports on the work of an unidentified training unit of Aeroflot, which prepares plane commanders and co-pilots. A number of instructors are named and their methods of work with students are described. Particular stress is laid on cooperation of teachers and flight instructors with the Party organization to tighten discipline and augment flight safety. A large proportion of the plane commanders of Aeroflot is said to have graduated from this training unit.

1. Air Forces--USSR
2. Aviation accidents--Countermeasures
3. Personnel--Training

Card 1/1

GARNJEK, N.

Effect of parachute-jump on the content of urobilinogen in urine.
Lek.wojsk., Warszawa 25:78-92 D '49. (CML 19:2)

TSOLOLO, A., kand.tekhn.nauk; GARNOV, A., inzh.

Coatings for reinforced concrete ships and containers resistant
to petroleum products. Rech. transp. 1^o no.11:30-31 N '60.

(MIRA 13:11)

(Protective coatings)

(Ships, Concrete)

ACC NR: AP6036097

SOURCE CODE: UR/0256/66/000/011/0022/0025

AUTHOR: Garnov, V. I.

ORG: none

TITLE: Rocket-course director [Air defense training]

SOURCE: Vestnik protivovozdushnoy oborony, no. 11, 1966, 22-25

TOPIC TAGS: air defense, antiaircraft defense, ^{specialized}~~air defense~~ training

ABSTRACT: In this article it is stated that during tactical exercises in the antiaircraft forces, the controller gives special attention to the direction of antiaircraft fire at low-altitude and small-sized targets and to the detailed study of ground interference, since such interference sometimes resembles signals from targets. It is also necessary to note any disturbance from neighboring stations and the length of time antiaircraft troops can remain at their air-defense posts in gas masks.

[WS]

SUB CODE: 1505/SUBM DATE: none/

Card 1/1

UDC: none

GARNOV, V. V. (Institute of Chemical Physics, Academy of Sciences of USSR)

High-Speed Stereoscopic Motion Picture Photography by means of the O P type of camera.

report submitted for the 5th International High Speed Photography Congress, Washington, D.C. 16-22 Oct., 1960.

GARNOV, V. V. (Institute of Chemical Physics, Academy of Sciences of USSR)
and DUBOVIN, A. S.

High-Speed St. reoscopic Motion Picture Photography at a Rate of UP to 1,250,000
Frames Per Second.

report submitted for: The 5th International High Speed Photography Congress,
Washington, D. C. 16-22 Oct., 1960.

S/120/60/000/005/044/051

E192/E382

AUTHORS: Garnov, V.V. and Dubovik, A.S.

TITLE: Projection on the Screen of the Photographs of ²⁰
Ultrafast Photo-recording Equipment, Type CDP(SFR)

PERIODICAL: Pribery i tekhnika eksperimenta, 1960, No. 5,
pp. 141 - 143

TEXT: The ultrafast photo-recording equipment, type SFR (Ref. 1), is employed in the investigation of very rapid processes. However, the resulting photographs cannot be projected directly onto a screen due to the non-standard form of the pictures (frames) and their limited number. Consequently, a special equipment was constructed at the Institute of Chemical Physics of the AS USSR which makes it possible to obtain standard films from the photographs so that these can be projected onto a screen. An example of a photograph showing the explosion of a charge is given in Fig. 1; this was taken by means of the SFR equipment. The same picture photographed on a standard film is given in Fig. 2. The "converting" device is illustrated in Fig.3. The operation of this system is as follows. A film from Card 1/4

S/120/60/000/005/044/051
E192/E382

Projection on the Screen of the Photographs of Ultrafast
Photo-recording Equipment, Type SFR

the SFR equipment 4 is illuminated by a device consisting of a lamp 1 and a condensing objective 2. The current of the lamp is controlled by a special variable resistance. The frames of the film 4 are situated in the focal plane of the objective 6 and are "reproduced" by the objective 8 in the focal plane of a projection camera, type "Rodina", where another film 11 is placed. The focusing of the optical system is achieved by displacing the objective 6. A shutter 7 is situated between objectives 6 and 8; this permits obtaining the exposure times up to 1/250 sec. The system is fitted with a diaphragm 5. When a frame is changed a mirror shutter closes the optical channel. The image of the frames situated on the film 4 is reconstructed on the grid of the sight 13 by means of the mirror shutter 9 and can be observed visually through the eyepiece 16. The sight with the grid permits setting of the successive pictures of the film 4 with an accuracy up to 0.01 mm.

Card 2/4

S/120/60/000/005/044/051
E192/E382

Projection on the Screen of the Photographs of Ultrafast
Photo-recording Equipment, Type SFR

After fixing a frame the shutter 7 is closed. The mirror shutter 9 opens the optical channel and the exposure of the frame is done by means of the shutter 7. The operation of the mirror shutter 9 is synchronised with the drive mechanism of the film 10. A prism 15 and a photo-resistor 14 are placed in the plane of the grid 13 and these operate as an exposure meter. By means of this device it is possible to determine the necessary exposure time for achieving uniform densities for various frames of the film. The photographic resolving power of the optical system of the equipment is 50 to 40 lines/mm. The projection of the resulting film has dimensions of 1.5 x 2 m and is effected by employing a projector type KД-3 (KD-3), which gives 24 frames/sec. Since the length of the film is small, it is necessary to arrange the film into a closed circle in order to obtain continuous projection.

Card 3/4

S/120/60/000/005/044/051
E192/E382

Projection on the Screen of the Photographs of Ultrafast
Photo-recording Equipment, Type SFR

There are 3 figures and 3 Soviet references.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR
(Institute of Chemical Physics of the AS USSR)

SUBMITTED: July 30, 1959

Card 4/4

23.1000

1138

89052

S/077/61/005/005/003/006
B019/B059

AUTHORS: Garnov, V. V., Dubovik, A. S.

TITLE: High-speed stereoscopic exposure and projection

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii,
v. 5, no. 5, 1961, 356 - 360

TEXT: At the institute given under association, a method of high-speed stereoscopic exposure by means of an CФP(SFR) apparatus was developed. This method, in which an additional stereoscopic attachment is used, was suggested by G. L. Shnirman and A. S. Dubovik. Fig. 1 shows the optical scheme of this device with the stereoscopic attachment. As was described in earlier publications, the SFR device has a two- or four-channel recording system in order to reach faster recording. Exposure is made simultaneously with both or all four ray paths, respectively (Fig. 1). 12 000 to 300 000 pictures per second can be taken with a two-channel camera, and 50 000 to 1 250 000 with a four-channel camera. Stereoscopic investigations of explosions were made by I. I. Tamm by means of such a camera. These investigations led to new knowledge concerning the departure of the

Card 1/3

89052

S/077/61/005/005/003/006
B019/B059

High-speed stereoscopic exposure...

explosion products. The pictures were projected by means of two synchronous projectors with the film having been re-copied to standard size. The stereoscopic attachment was devised at the Eksperimental'nyye masterskiy IKhF AN SSSR (Experimental Works of the IKhF AS USSR) under the supervision of design engineer Ye. A. Zaytsev. The major part of the experiments was made by the laboratory assistant V. V. Shauro. There are 4 figures and 5 Soviet-bloc references. X

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences USSR)

SUBMITTED: February 14, 1960

Card 2/3

89052

High-speed stereoscopic exposure...

S/077/61/005/005/003/006
B019/B059

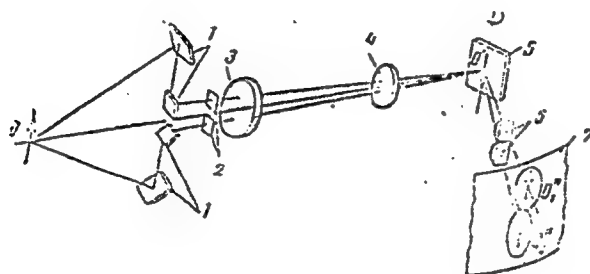


Fig. 1

Legend: 0 denotes the object. 1) Periscopes; 2) aperture diaphragms;
3) objective; 4) collector; 5) revolving reflector; 6) small lenses.

Card 3/3

GARNOV, V. V.

"Stereoscopic Photography for Investigation Different High Speed Processes"

report presented at the 6th Intl. Cong. of High-Speed Photography,
The Hague, 17-22 Sep '62

ACCESSION NR: AP3003606

3/0077/63/008/004/0270/0275

AUTHORS: Garnov, V. V.; Shauro, V. V.

TITLE: High speed photography of luminous processes with color film

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 8, no. 4, 1963, 270-275

TOPIC TAGS: photography, high speed photography, luminous process, combustion process, color film, high speed motion picture camera, thallium salts, VV explosive, VV liquid explosive, GS 50/50 liquid explosive, trotyl, ammonite, SFT-2 high speed camera, SFR-2M high speed camera, ZhFR high speed camera

ABSTRACT: The possibility of using a color film DS-2v for high-speed photography of luminous processes is discussed. The photosensitivity of a film and the magnitude of a delay necessary for achieving best results were calculated. Because the DS-2v photosensitivity was insufficient for registering the VV detonations in a broad temperature interval, a special process for developing the DS-2v films was worked out, based on the use of thallium salts. The tests of the process consisted of photographing explosions of different VVs, including trotyl, ammonite

Card 1/2

ACCESSION NR: AP3003606

No. 6, TG 50/50, liquid VV, and various gas mixtures. The explosion color temperatures ranged from 2500K to 6000K. The charges varying from ten grams to several hundreds of kilograms were exploded in air and in special containers, such as gas-chambers, pipes, etc. It was established that: 1) DS-2v film can be used in the color photography of explosion processes in cameras with a speed range from 25 000 to 625 000 frames/second and at temperatures of 2500-6000K; 2) the use of thallium salts in the new procedure of film development increased the photosensitivity of the film 3-4 times. "The authors consider it their duty to thank Doctor of technical sciences V. Ya. Mikhailov and Doctor of technical sciences A. S. Dubovik for the discussion of this article and for valuable remarks". Orig. art. has: 4 figures.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AN SSSR)

SUBMITTED: 14Jun62

DATE ACQ: 02Aug63

ENCL: 00

SUB CODE: CH, PH

NO REF SOV: 007

OTHER: 000

Card 2/2

ACCESSION NR: AP4026819

S/0077/64/009/002/0116/0121

AUTHORS: Garnov, V. V.; Dubovik, A. S.

TITLE: Stereoscopic filming of high-speed processes by two independently working motion picture cameras

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 9, no. 2, 1964, 116-121

TOPIC TAGS: photography, stereoscopic photography, pulsation frequency/SM 4 stereometer

ABSTRACT: The nature of the method of making stereoscopic pictures of a high-speed process by means of "pulsation frequencies" was treated both qualitatively and quantitatively. The method was cited as being more dependable than mechanical camera synchronization and less complex and less expensive than electronic means. The case of different filming frequencies for each of two cameras was studied (the special case of identical frequencies satisfies the same general relationships). The coincidence relationships developed were: 1) the time interval between stereopair formation T_{st} is given by $T_{st} = kt_1 = mt_2$, where t_1 and t_2 are times between films for cameras 1 and 2 respectively, and k and m are constants

Card

1/3

ACCESSION NR: AP4026819

representing the number of exposures per unit time for 1 and 2 respectively. The frequency of stereopair formation h_{ot} is then given by $h_{cr} = \frac{1}{T_{cr}} = \frac{1}{kl_1} = \frac{1}{ml_2} = \frac{h_1}{k} = \frac{h_2}{m}$.

At pulsation points the time lag in synchronization Δt_p is

$$\Delta t_p = \frac{l_1 - l_2}{2(m-k)} = \frac{T_{cr}}{2mk} = \frac{l_1}{2m} = \frac{l_2}{2k} = \frac{1}{2mn_1} = \frac{1}{2kn_2}.$$

An additional relationship is presented relating filming parameters to process speed. The independence of camera operation is emphasized by a schematic diagram. A test of the method was made by tracing the throw-out trajectories of soil during an underground explosion; accuracies between 1/600 and 1/800 were obtained for path coordinates. Stereometer SM-4 was used in this test. The use of a third camera in a high-speed process to provide a supplementary stereopair system is mentioned. Satisfaction of pulsation conditions is mainly dependent on stability of filming frequency. Analysis showed that a film speed of 100 exposures per second must be accompanied by a filming frequency accurate to 1% for good results. The authors thank N. M. Sitsinskaya for discussing the work. Orig. art. has: 12 equations and 4 figures.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AN SSSR)

Card

2/3

ACCESSION NR: AP4026819

SUBMITTED: 03Jun63

SUB CODE: ES

NO REF SOV: 003

ENCL: 00

OTHER: 000

Card 3/3

L 12010-66

EPA/EWT(1)/EWT(m)/T/EWA(c)

IJP(c)

WW/JWD

ACC NR: AT6001407

SOURCE CODE: UR/3180/64/009/000/0201/0208

AUTHOR: Garnov, V. V.

ORG: none

TITLE: Stereoscopic photoregistration of some fast processes

SOURCE: AN SSSR, Komissiya po nauchnoy fotografii i kinematografii. Uspexi nauchnoy fotografii, v. 9, 1964. Vysokoskorostnaya fotografiya i kinematografiya (High-speed photography and cinematography), 201-208

TOPIC TAGS: high speed photography, stereoscopic photography, photographic equipment, projection apparatus, SFR 2M camera

ABSTRACT: This article describes some studies of fast processes by means of stereoscopic photography carried out at the Institute of Chemical Physics, AN SSSR (Institut khimicheskoy fiziki AN SSSR). For the attainment of high quality photographs the photographic resolving power of the system must be fully utilized, especially for velocities parallel to the basis of the picture. The author also discusses the problem of synchronization in photography and automated methods for finding the stereopair for two pictures

Card 1/2

L 12010-66

ACC NR: AT6001407

taken on separate films. The method was applied to the study of detonations of explosives weighing up to 200 kg. Two SFR-2M cameras ($f_k = 70$ or 210 mm) were located at the ends of a 7 — 10-m base and operated synchronously with a picture-taking frequency of 625,000 sec⁻¹. Pictures were taken at a certain angle of convergence. The distance of the devices from the epicenter of the explosion was 50 — 100 m. The author concludes by a brief description of stereometers used for the analysis of the pictures; he recommends the SM-4 stereometer (F. V. Drobyshev, Osnovy aerofotos'yemki i fotogrammetrii. Geodezizdat, 1955) which permits an accurate determination of the paralax and automatically introduces the orientation error corrections. Orig. art. has: 12 formulas and 4 figures.

SUB CODE: 14 / SUBM DATE: none / ORIG REF: 006

Card 2/2

L 36268-65 EWT(1)/T/EED(b)-3 Pae-2 IJP(c)

ACCESSION NR: AP50001169

8/0286/65/000/005/0052/0052

AUTHORS: Fedin, Ye. D.; Garinov, V. V.; Lipanin, G. G.

TITLE: A device for high-speed pulsed stereoscopic x-ray photographing of rapidly occurring processes. Class 21, No. 168804

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 52

TOPIC TAGS: x ray photography, stereoscopic photography, spatial perception

ABSTRACT: This Author Certificate presents a device for the high-speed pulsed stereoscopic x-ray photographing of rapidly occurring processes. It contains pulsed x-ray tubes, pulse voltage generators, and a synchronizing device (see Fig. 1 on the Enclosure). To insure the exact timing of the radiography and the reconstruction of the three-dimensional model of the objects being studied, the pulsed x-ray tubes are connected in pairs to a single pulse voltage generator. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 14Mar63

ENCL: 01

SUB CODE: E3, OP

NO REF SOV: 000

OTHER: 000

Card 1/2

GARNOV, V.V.; FEDIN, Ye.D.

High speed stereo radiography. Zhur. nauch. i prikl. fot. i kin.
10 no.2:124-131 Mr-Ap '65. (MIRA 18:5)

1. Institut fiziki Zemli imeni Shmidt AN SSSR.

L 36828-66 EWT(1)/T IJP(c)

ACC NR: AP6016937

(A)

SOURCE CODE: UR/0077/66/011/001/0033/0038

AUTHOR: Dubovik, A. S.; Garnov, V. V.

42
B

ORG: Institute of Physics of the Earth im. O. Yu. Shmidt, AN SSSR (Institut fiziki Zemli AN SSSR)

TITLE: State of the art and some developments in high-speed stereophotography 10

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 11, no. 1, 1966, 33-38

TOPIC TAGS: stereoscopic photography, high speed photography, motion picture photography, motion picture projector

ABSTRACT: This paper is a report on the present state of high-speed stereophotography as well as on developing trends in this field. High-speed stereoscopic photography is conditionally divided into two classes according to base length: 1. base length less than 1 meter; 2. base length greater than 1 meter. A single camera is generally used for the first class while the second ordinarily requires two cameras. Camera synchronization in the second case is accomplished either by mechanical methods or by remote control. The Institute of Physics of the Earth AN SSSR uses an installation with two AKS-2 cameras separated by a distance of 2 meters and mounted on a rigid base. This unit may be used for photography at 100 frames per second with an exposure time of

Card 1/2

UDC: 778.4:778.37

U 50020-05

ACC NR: AP6016937

1/1000 second. The "beat frequency" method may be used for synchronizing cameras separated by distances too great for practical connection. In this case both cameras operate at a predetermined frequency to produce stereopairs. A base line of 20-30 m may be used in practical application of this method. The short-base system generally uses a single camera with special stereoscopic attachments. These may be divided into split-frame and full-frame units. The split-frame method uses mirrors to produce two images of the specimen being photographed on a single frame. The second method combines mirrors with optical commutation to produce two full-frame images of the process being photographed. This type of attachment with the SFR-L camera may be used for photography at a rate of up to 1,250,000 frames per second on a base line of up to 800 mm. Polaroid equipment for projection of stereoscopic motion pictures is also described. Orig. art. has: 7 figures.

SUB CODE: 14/ SUBM DATE: 05Nov64/ ORIG REF: 011/ OTH REF: 004

Card 2/2

5(2)

AUTHORS:

Garnova, T. G., Zlotnikov, L. Ye., SOV/32-25-2-15/78
Moshinskaya, M. B., Paradzhanova, N. G.,
Shvartsman, V. P.

TITLE:

The Testing of Chromathermographic Gas Analyzers (Ispytaniya khromatermograficheskikh gazoanalizatorov)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 2, pp 157-159 (USSR)

ABSTRACT:

The operation of the thermodynamic gas analyzer KhT-2 and the universal chromathermographic setup of the KhT-3 model was tested. Both apparatus have already been described in another paper (Ref). The KhT-2 model was used to analyze the discharge of the propane column of a gas fractionating unit. It is fully automated, and it has been possible to carry out 1193 analyses in 68 days with this apparatus. The universal chromathermograph KhT-3 was used in the central laboratory of the Moscow Petroleum Processing Plant (see Ass.). Parallel determinations were carried out with the Podbil'nyak apparatus which is in general use (Tables 1,2). The investigation results are in good agreement. The advantage of the KhT-2 apparatus is, however, that the saturated and unsaturated hydrocarbons up to C₄, including the butane isomers can be determined with it in

Card 1/2

The Testing of Chromathermographic Gas Analyzers

SOV/32-25-2-15/78

one operation, while the KhT-3 apparatus in addition to the saturated and unsaturated hydrocarbons also permits the determination of all butane, butylene, pentane, and amylene isomers (15-20 components). In the investigations at the Moscow Petroleum Refining Plant the authors were assisted by L. P. Zhigacheva, T. V. Krasnova, I. P. Lentishchev, V. V. Naumova, A. A. Osaulenko, S. E. Simongau, A. V. Pupkov, S. Sadkov, and B. V. Alekseyev. There are 1 figure, 2 tables, and 1 Soviet reference.

ASSOCIATION: Moskovskiy neftepererabatyvayushchiy zavod (Moscow Petroleum Refining Plant)

Card 2/2

GARNOVSKAYA, G. N.

DECEASED

1963/1

c. 1960

CHEMISTRY

see ILC

SIMONOV, A.M.; GARNOVSKIY, A.D.

Amination of heterocyclic compounds containing an imidazole ring.
Zhur. ob. khim. 31 no.1:114-117 Ja '61. (MIRA 14:1)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Amination) (Benzimidazole)
(Pheanthrimidazole) (Imidazole)

GARNOVSKIY, A.D.; SIMONOV, A.M.

Some transformations of heterocyclic systems containing an imidazole ring. Part 2: Amination of N-alkyl substituted naphth(1, 2)imidazole and 6, 7, 8, 9-tetrahydronaphth(1, 2)imidazole. Zhur.ob.khim. 31 no.6:1941-1944 Je '61. (MIRA 14:6)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Naphthimidazole) (Amination)

OSIPOV, O.A.; SIMONOV, A.M.; MINKIN, V.I.; GARNOVSKIY, A.D.

Dipole moments of imidazole and its derivatives. Dokl.AN SSSR 137
no.6:1374-1376 Ap '61. (MIRA 14:4)

1. Rostovskiy-na-Donu gosudarstvennyy universitet. Predstavleno
akademikom M.M.Shemyakinym.
(Imidazole—Dipole moments)

MINKIN, V.I.; OSPOV, O.A.; GARNOVSKIY, A.D.; SIDONOV, A.M.

Dipole moments of imidazole and its derivatives. Zhur. fiz.
khim. 36 no.3:469-473 Mr '62. (MIRA 17:8)

1. Rostovskiy gosudarstvennyy universitet.

SIMONOV, A. M.; POZHARSKIY, A. F.; GARNOVSKIY, A. D.

Results of the proceedings of the conference on five-membered
nitrogen heterocycles. Zhur. VKHO 8 no.2:219-221 '63.
(MIRA 16:4)

(Heterocyclic compounds—Congresses)
(Nitrogen compounds)

ACCESSION NR: AP4014693

S/0249/63/019/009/0021/0024

AUTHORS: Osipov, O. A.; Ismailov, Kh. M.; Kashireninov, O. Ye.; Garnovskiy, A. D.; Orlova, L. V.

TITLE: Investigation of some dialkylaminomethylphenols and aromatic sulfides
(Presented by M. A. Dalin, academician of the Azerbaydzhan (AN SSR))

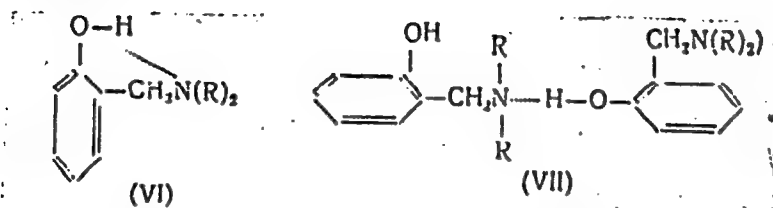
SOURCE: AN AzerbSSR. Doklady*, v. 19, no. 9, 1963, 21-24

TOPIC TAGS: antioxidant, dialkylaminomethylphenol, sulfide, intramolecular bond, intermolecular bond, hydrogen bond, dipole moment, magnetic susceptibility, infrared spectra

ABSTRACT: The dipole moments and magnetic susceptibility and the infrared spectra of dialkylaminomethylphenols (DAAMP) and aminomethyl derivatives of alkylphenyl-sulfides (AMAPS) were studied. These substances were of interest as potential antioxidants for lubricating oils, and they all contained a phenolic hydroxyl group in ortho position in respect to the dialkylaminomethyl group. The investigation centered on whether there occurred in these compounds the formation of either intramolecular or intermolecular hydrogen bonds, as

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ACCESSION NR: AP4014693



To this end, dielectric conductivity measurements were conducted in benzene solutions and the dipole moments calculated, using P. A. Osipov's technique (ZhOKh. 156, t. 26). The existence of intramolecular hydrogen bonds in most of the DAAMP was confirmed, but was proved absent in the AMAPS compounds. Orig. art. has: 2 formulas and 3 tables.

ASSOCIATION: Rostovskiy-na-Donu gosudarstvennyy universitet (Rostov-on-the Don State University); Institut neftekhimicheskikh protsessov (Institute of Petroleum Processes)

Card 2/3

SIMONOV, A.M.; GARNOVSKIY, A.D.; SHEYNKER, Yu.N.; KHRISTICH, B.I.;
TROFIMOVA, S.S.

Some transformations of the systems containing an imidazole
ring. Part 3: Action of bases of N-methyl-N'-(2,4-dinitrophenyl)
imidazolium salts. Zhur. khim. 33 no.2:571-579 F '63.

(MIRA 16:2)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Imidazolium compounds)

KOGAN, V.A.; OSIPOV, O.A.; GARNOVSKIY, A.D.

Compounds of thorium tetranitrates with salicylaniline.
Zhur. neorg. khim. 9 no.2:494 F'64. (MIRA 17:2)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.

GARNOVSKIY, A.D.; SIMONOV, A.M.; MINKIN, V.I.; DIONIS'YEV, V.D.

Transformations of systems containing an imidazole ring. Part 4:
Electron absorption spectra of N-alkyl-N'-3,4-dinitrophenyl imida-
zolium salts. Zhur.ob.khim. 34 no.1:272-276 Ja '64. (MIRA 17:3)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.

L 17823-65 EPA(s)-2/EWT(m)/EPF(c)/EPR/ENP(j)/T Pc-L/Pr-L/Ps-L/Pt-10 RPL/
RAEM(a) RM/WW
ACCESSION NR: AP4047650 S/0079/64/034/010/3407/3411

AUTHOR: Garnovskiy, A. D.; Osipov, O. A.; Dalgatov, D. D.; Simonov, A. M.; Minkin, V. I. ⁶

TITLE: Complex compounds of metals with certain nitrogen-containing ligands.
I. Complexes of the 2-o-hydroxyanilbenzimidazole series

SOURCE: Zhurnal obshchey khimii, v. 34, no. 10, 1964, 3407-3411

TOPIC TAGS: organometallic compound, chelate compound, benzimidazole derivative, organic complex

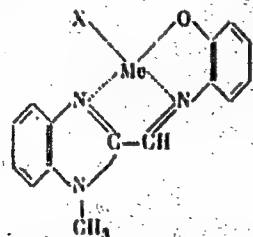
ABSTRACT: Two new o-hydroxyanils of 1-methyl-2-formylbenzimidazole were synthesized: 1-methylbenzimidazole-2-aldehyde-2'-hydroxyphenylimine and 1-methylbenzimidazole-2-aldehyde-(2'-acetylamino-5'-methoxy)phenylimine. The complex-forming ability of the first compound was investigated; the complexes of the second compound are to be subsequently described. Heating an alcoholic solution of the compound with the acetates or nitrates of Cu, Ni, Pb, Mn, Th or UO₂ gave brightly colored thermally stable rather insoluble crystals. Based

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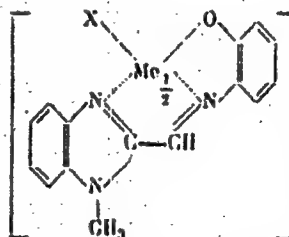
15

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ACCESSION NR: AP4047650

on elementary analysis and IR spectra, the 1:1 complexes formed with Pb and UO_2 and the 2:1 complexes formed with Ni and Th were assigned the following chelate structures:



(III) $\text{Me} = \text{Pb}$, $\text{X} = \text{OCOCH}_3$, NO_2 ;
(IV) $\text{Me} = \text{UO}_2$, $\text{X} = \text{OCOCH}_3$.



(V) $\text{Me} = \text{Ni}$, $\text{X} = \text{нулю}$;
(VI) $\text{Me} = \text{Th}$, $\text{X} = \text{NO}_2$.

1-methylbenzimidazole-2 derivatives containing no hydroxyl group or hydroxyl group in the p-position would not complex. The heteroatom of the imidazole ring

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ACCESSION NR: AP4047650

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was also shown necessary for chelate formation, since benzal-o-aminophenol would not form a complex under similar conditions. "Spectra were obtained by V. N. Sheynker on the UR-10 (Zeiss) apparatus in a paste with vaseline oil."
Orig. art has: 10 formulae

ASSOCIATION: Rostovskiy-na-Dony gosudarstvennyy universitet (Rostov-on-Don State University)

SUBMITTED: 01Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 006

OTHER: 010

Card 3/3

ISMAYLOV, Kh.M.; OSIPOV, O.A.; GARNOVSKIY, A.D.; KASHIRENINOV, G.Ye.;
CHIKINA, N.L.

Complex compounds of metals of group IV with dialkylaminomethyl-
phenols and their sulfides. Dokl. AN Azerb. SSR 21 no.3:34-38
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1. Institut neftekhimicheskikh protsessov im. Yu.G.Mamedaliyeva
AN AzerSSR i Rostovskiy gosudarstvennyy universitet.

MINKIN, V.I.; ZHDANOV, Yu.A.; GARNOVSKIY, A.D.; SADEKOV, I.D.

Special features of the intramolecular hydrogen bonding in molecules of the anils of o-hydroxyaldehydes and o-hydroxyanils. Dokl. AN SSSR 162 no.1:108-111 My '65. (MIRA 18:5)

1. Rostovskiy-na-Donu gosudarstvennyy universitet. Submitted August 27, 1964.

GARNOVSKIY, A.P.; GELFON, O.A.; ORLOVA, L.V.; MININ, V.I.

Copper complexes of benzal-o-aminophenols. Zhur.noorg.khim.
10 no.12:2821-2824 D '65. (MIRA 1961)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.

FREYBERG, Ye.; TIKHOMIROV, B.A., prof.; GAJUKOVSKIY, Kr.

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1. Iz Respublikanskoy sanitarno-epidemiologicheskoy stantsii (glavnyy
vrach L.A. Sakvarelidze) Ministerstva zdravookhraneniya Gruzinskoy
SSR, Tbilisi.

(VITAMIN C ther.)

(PUERPERIUM)

GARNOVSKIY, Nikolay Nikolayevich; SAPOZHKOV, M.A., otvetstvennyy redaktor;
LUZHETSKIY, N.N., redaktor; LEDNEVA, N.V., tekhnicheskiiy redaktor.

[Theoretical bases of electric wire communication] Teoreticheskie osnovy elektroprovodnoi svyazi. Moskva, Gos.izd-vo lit-ry po voprosam svyazi i radio. Part.1. [General theory of passive linear circuits with lumped constants] Obshchaya teoriya passivnykh lineynykh tsepei s sosredotochennymi postoiannymi. 1956. 691 p.
(MLRA 10:6)

(Electric circuits)

6(7)

PHASE I BOOK EXPLOITATION

SOV/3496

Garnovskiy, Nikolay Nikolayevich

Teoreticheskiye osnovy elektroprovodnoy svyazi. ch II: Teoriya tsepey s raspredelennymi postoyannymi (Theoretical Fundamentals of Wire Communications. Pt. 2: Theory of Circuits With Distributed Constants) Moscow, Svyaz'izdat, 1959. 386 p. Errata slip inserted. 6,600 copies printed.

Resp. Ed.: K. Ye. Kul'batskiy; Ed.: N.N. Luzhetskiy; Tech. Ed.: A. B. Veyntraub.

PURPOSE: The book is intended for aspirants, students of schools of higher education, and engineers and scientists concerned with problems of electrical communications.

COVERAGE: The author outlines the theory of circuits with distributed constants and presents methods and examples of calculating circuits of great practical importance. The author thanks Doctor of Technical Sciences Professor I. G. Klyatskin, Doctor of Technical Sciences K.Ye. Kul'batskiy, and Candidate of Technical Sciences A. P. Udalov for their help. There are 59 references: 56 Soviet (18 of which are translations), 2 English, and 1 German.

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with new hemostatic clamps. Gruslica, Warszawa 17 no.3-4:309-312
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